

C O N F I D E N T I A L

February 10th, 1959.

COCOM Document No. 3419.20/2

COORDINATING COMMITTEE

*5 General*

RECORD OF DISCUSSION

ON

ITEM 1920: SYNTHETIC FILM FOR DIELECTRIC USE

29th January, 1959.

Present: Belgium(Luxembourg), Canada, Denmark, France, Germany, Italy, Japan, Netherlands, Norway, Turkey, United Kingdom, United States.

References: COCOM Documents Nos. 3019.20/1 and 3419.20/1.

1. The CHAIRMAN asked for the views of Delegations on the text proposed by the French Delegation on the 16th January as an amendment of the German Delegation's proposal in COCOM Document No. 3019.20/1.
2. The GERMAN Delegate said he could accept the French proposal.
3. The UNITED KINGDOM Delegate said that his authorities could accept the amendment of the existing definition in the way proposed by the French Delegation in paragraph 2 of COCOM Document No. 3419.20/1. They did not, however, subscribe to the remarks set out in the last five lines of that paragraph, as at the present stage they were unable to accept the implications of the French expert's statement concerning P.V.C., Teflon and Hostafylon.
4. The UNITED STATES Delegate said that his authorities had had difficulty in completing their study of the French revision of the German proposal in the short time at their disposal. On the basis of information cabled to Washington by the Delegation at the close of the meeting of the 16th January, however, they believed that the effect of the change would be to decontrol all dielectric film in which the dielectric characteristics changed as the temperature changed. If that were the case, it would be tantamount to decontrolling all dielectric film. If that would be the effect, the United States authorities could not accept the change of definition. If that would not be the effect, the experts in Washington would study the matter further and expeditiously. The Delegate said he would welcome the views of the French Delegation.
5. The FRENCH Delegate said that he would ask his expert to reply. The expert explained that the last two sentences of his statement on the 16th January were only intended to explain what was meant by "dielectric characteristics". He pointed out that when a dielectric was submitted to an alternating electric field, high frequency and low frequency, it underwent losses caused by the electric field which changed its own characteristics. Certain dielectrics could be used at ambient temperatures of about 100° C but their functioning as a dielectric in an alternating high and low-frequency field raised them to higher temperatures and on that account certain dielectrics lost not only their dielectric characteristics but also their insulating characteristics. No dielectric, especially in the temperature range between - 45° and + 100° C. was capable of maintaining all its characteristics - e.g. those possessed at 25° C.
6. The GERMAN Delegate suggested that it might facilitate matters for the United States Delegation if in place of this highly technical definition

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the Committee could consider the following wording: "capable of being used for electronic components covered by Item 1560".

7. The UNITED KINGDOM Delegate said that he could agree with the view of the German Delegate that the control over the foils covered by Item 1920 should be related to the kinds of capacitors embargoed under the definition of Item 1560.
8. The UNITED STATES Delegate agreed that this appeared logical. He wished to point out to the French expert, with due deference, that what he had said was that his authorities believed the effect of the revision would be to decontrol all dielectric film in which the dielectric characteristics changed as the temperature changed.
9. The French expert explained that when a condenser, for example, was manufactured, in order to maintain its characteristics only between - 45° and + 100°, as specified in the definition, its dielectric could be raised to temperatures higher than this temperature range. This was the case for condensers functioning on alternating current, where a certain quantity of energy was dissipated into the dielectric itself. Supposing that an embargoed dielectric were used, such as Teflon in thin sheets, manufactured in such a way as to maintain its dielectric rigidity (which was not easy, from the technical point of view) the result would be a material capable of being used at 100°C. Condensers designed in relatively small sizes would have a dielectric strength varying in proportion to the electric field. The service lifetime in the case of Teflon would be longer and for a dielectric film of a lower grade would be shorter. Perhaps it would be possible to work out a definition which would take account of the service lifetime of the dielectric.
10. The CHAIRMAN asked for views as to the proposal by the German Delegate to add to the present definition of Item 1920 the words "and capable of being used for electronic components covered by Item 1560".
11. The NETHERLANDS Delegate said that, as his authorities seemed hesitant as regards the French amendment, he had asked for technical explanations. These had not yet arrived, but he felt that as the new German proposal seemed to get rid of the difficulties, he could accept it ad referendum.
12. The JAPANESE Delegate said that the new German proposal was very easy to understand and he was in favour of it.
13. The FRENCH Delegate pointed out that the French text of Item 1920 referred to "papier condensateur", whereas the English text spoke of "condenser tissue". He thought that there were possibilities of misunderstanding here. In his view, "condenser tissue" should be translated by the words "diélectrique pour condensateurs". If that correction were made, the French Delegation would be able to accept the German proposal.
14. The JAPANESE and NETHERLANDS Delegations accepted the German proposal, and the ITALIAN and UNITED KINGDOM Delegations undertook to report.
15. The CHAIRMAN said that a Corrigendum to the French text of Item 1920 would be issued, and that the question of changing the definition in the way proposed by the German Delegate at the present meeting would be discussed again on the 12th February, when he hoped unanimous agreement would be possible.

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